

REMARKS

In the present patent application, claims 1-22 are pending. Applicant has amended claims 1, 8, 9 and 14 and cancelled claims 6 and 19. Applicant respectfully requests reconsideration of the claims in view of following remarks.

Applicant notes that the Examiner indicated that independent claims 21 and 22 would be in condition for allowance if they were rewritten in independent form. However, since they are already written in independent form, applicant submits that claims 21 and 22 are already in condition for allowance.

Support for the claim amendments can be found in the specification, original claims, and figures. Accordingly, applicant submits that no new matter has been introduced by the claim amendments. Further, since the subject matter in the claim amendments was already present in the originally filed dependent claims, applicant submits that no additional search would be required by the Examiner for entering the amendments.

Claims 1, 6, 9 and 14 were rejected under 35 U.S.C. § 103(a) based on Ariav et al. (U.S. Patent Publication No. 2006/0087325, in view of Bowers (U.S. Patent No. 5,207,230.

Referring to independent claim 1, as amended, the claim recites in part:

"a plastic cord having a portion that is configured to be placed across a chest of a person, the plastic cord being substantially transparent to x-rays; and,

a linear position encoder coupled to an end of the plastic cord, the end of the plastic cord being configured to be disposed away from the chest of the person, the linear position encoder generating a measurement signal indicative of an amount of linear displacement of the plastic cord during respiration by the person."

Referring to Ariav et al., the reference is directed to a sensor that measures a respiration or cardiac rate of a person. The Bowers reference is directed to a spiral sensor. However, neither reference provides any teaching of: "a linear position encoder coupled to an end of the plastic cord, the end of the plastic cord being configured to be disposed away from the chest of the person, the linear position encoder generating a measurement signal indicative of an amount

of linear displacement of the plastic cord during respiration by the person", as recited in claim 1 as amended.

Accordingly, because the combination of Ariav et al. and Bowers does not teach each and every element of independent claim 1, as amended, applicant submits that claim 1 is allowable over these references.

Referring to independent claim 9, as amended, the claim recites in part:

"disposing a portion of a plastic cord across a chest of the person, wherein a linear position encoder is coupled to an end of the plastic cord and is disposed away from the chest of the person, the plastic cord being substantially transparent to x-rays; and,
generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing the linear position encoder coupled to the end of the plastic cord."

Referring to Ariav et al. and Bowers, the references alone or in combination do not provide any teaching of: "disposing a portion of a plastic cord across a chest of the person, wherein a linear position encoder is coupled to an end of the plastic cord and is disposed away from the chest of the person, the plastic cord being substantially transparent to x-rays", as recited in claim 9 as amended. Further, the references do not provide any teaching of: "generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person utilizing the linear position encoder coupled to the end of the plastic cord", as recited in claim 9 as amended.

Accordingly, because the combination of Ariav et al. and Bowers does not teach each and every element of independent claim 9, as amended, applicant submits that claim 9 is allowable over these references.

Referring to independent claim 14, as amended, the claim recites in part:

"a linear position encoder operatively coupled to an end of the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the end of the plastic cord and the linear position encoder being

configured to be disposed away from the chest of the person outside a scanning area of the X-ray device."

Referring to Ariav et al. and Bowers, the references alone or in combination do not provide any teaching of: "a linear position encoder operatively coupled to an end of the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the end of the plastic cord and the linear position encoder being configured to be disposed away from the chest of the person outside a scanning area of the X-ray device", as recited in claim 14 as amended.

Accordingly, because the combination of Ariav et al. and Bowers does not teach each and every element of independent claim 14 as amended, applicant submits that claim 14 is allowable over these references.

Claims 4, 5, 10, 11, 17 and 18 were rejected under 35 U.S.C. § 103(a) based on Ariav et al. in view of Bowers, and in further view of Zomer (U.S. Patent No. 5,235,989).

Claims 4 and 5 depend from claim 1 and thus include all of the limitations of claim 1 as amended. Ariav et al., Bowers, and Zomer do not provide any teaching of: "a linear position encoder coupled to an end of the plastic cord, the end of the plastic cord being configured to be disposed away from the chest of the person, the linear position encoder generating a measurement signal indicative of an amount of linear displacement of the plastic cord during respiration by the person", as recited in claims 1, 4 and 5.

Accordingly, because the combination of Ariav et al., Bowers and Zomer does not teach each and every element of claim 1, and claims 4 and 5 which depend from claim 1, applicant submits that claims 4 and 5 are allowable over these references.

Claims 10 and 11 depend from claim 9 and thus include all of the limitations of claim 9 as amended. Ariav et al., Bowers, and Zomer do not provide any teaching of: "disposing a portion of a plastic cord across a chest of the person, wherein a linear position encoder is coupled to an end of the plastic cord and is disposed away from the chest of the person, the plastic cord being substantially transparent to x-rays", as recited in claims 9, 10 and 11. Further, the references do not provide any teaching of: "generating a measurement signal indicative of an

amount of displacement of the plastic cord during respiration by the person utilizing the linear position encoder coupled to the end of the plastic cord", as recited in claims 9, 10 and 11.

Accordingly, because the combination of Ariav et al., Bowers and Zomer does not teach each and every element of claim 9 and claims 10 and 11 which depend from claim 9, applicant submits that claims 10 and 11 are allowable over these references.

Claims 17 and 18 depend from claim 14 and thus include all of the limitations of claim 14 as amended. Ariav et al., Bowers, and Zomer do not provide any teaching of: "a linear position encoder operatively coupled to an end of the plastic cord generating a measurement signal indicative of an amount of displacement of the plastic cord during respiration by the person, the end of the plastic cord and the linear position encoder being configured to be disposed away from the chest of the person outside a scanning area of the X-ray device", as recited in claims 14, 17 and 18.

Accordingly, because the combination of Ariav et al., Bowers and Zomer does not teach each and every element of claim 14, and claims 17 and 18 which depend from claim 14, applicant submits that claims 17 and 18 are allowable over these references.

Claims 2 and 3 were rejected under 35 U.S.C. § 103(a) based on Ariav et al. in view of Bowers and further in view of Rasche et al. (U.S. Patent No. 6,865,248), and in further view of Sontag et al. (U.S. Patent No. 6,298,260).

Claims 2 and 3 depend from claim 1 and thus include all of the limitations of claim 1 as amended. Ariav et al., Bowers, Rasche et al. and Sontag et al. do not provide any teaching of: "a linear position encoder coupled to an end of the plastic cord, the end of the plastic cord being configured to be disposed away from the chest of the person, the linear position encoder generating a measurement signal indicative of an amount of linear displacement of the plastic cord during respiration by the person", as recited in claims 1, 2 and 3.

Accordingly, because the combination of Ariav et al., Bowers, Rasche et al. and Sontag et al. does not teach each and every element of claim 1, and claims 2 and 3 which depend from claim 1, applicant submits that claims 2 and 3 are allowable over these references.

In view of the foregoing remarks, applicant respectfully submits that the instant application is in condition for allowance. Such action is most earnestly solicited. If for any reason the Examiner feels that consultation with applicant's attorney would be helpful in the advancement of the prosecution, the Examiner is invited to call the telephone number below for an interview.

If there are any charges due with respect to this response document or otherwise, please charge them to Deposit Account No. 07-0845.

Respectfully Submitted,
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